From: Spence, Sandra

To: Ostrander, David; Wharton, Steve; Wall, Dan; McComb, Martin; Myers, Craig

Subject: FW: Animas River (1508040) Data Package
Date: Friday, August 28, 2015 10:37:12 AM

Attachments: 1508040 FINAL 28 Aug 15.pdf

EPAR8 SCRIBE 1508040 FINAL 28 Aug 15 0928.xls

Animas River (1508040) Disposal.docx

Hi All, These are the algae and nutrient data that the lab ran for me to answer the "why is the water green blue in the upper Animas" question. I'm not sure who to provide these to....let me know as it would be good to capture the information.

Thanks

From: Batschelet, William

Sent: Friday, August 28, 2015 9:46 AM

To: Spence, Sandra **Cc:** Burkhardt, Mark

Subject: Animas River (1508040) Data Package

Attached are the laboratory report, associated data in Scribe compatible electronic format, and sample disposal report for your laboratory service request 1508040 / laboratory project 1508040. Feel free to contact me if you have any questions.

Sandy – This is the complete, final report for these samples, and it confirms the chlorophyll results I previously emailed you.

Bill

William H. Batschelet, PhD Quality Assurance Officer USEPA Region 8 Laboratory 16194 W 45th Drive Golden, CO 80403-1790

Phone: 303-312-7792 FAX: 303-312-7800



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8 LABORATORY

16194 W 45th Drive GOLDEN, CO 80403-1790 Phone 303-312-7700

Ref: 8TMS-L

MEMORANDUM

SUBJECT: Analytical Results--- Animas River 2015 nutrients / 1508040

FROM: Jack Sheets, Inorganic Chemist

Jeff McPherson, Biologist

William H. Batschelet, PhD, Laboratory Quality Assurance Officer

THRU: Mark Burkhardt, PhD, Director

Laboratory Services Program

TO: Sandie Spence, 1595 Wynkoop

Emergency Response

Attached are the analytical results for Animas River 2015 nutrients 1508040. The table below shows the number of containers received, the work order number(s) assigned, and the date received:

	1508040	Total
19-Aug-2015	15	15

These samples were prepared, analyzed, and verified by the Region 8 Laboratory according to the requirements of the Laboratory Services Request (LSR) and procedures found in the laboratory Quality Assurance Manual (QSP-001) dated June 11, 2014.

Certificate of Analysis

Sample Receipt

All samples were received in acceptable condition except as noted in the Analyst Comments or Appendix A. The number of samples received and analyses are listed in Appendix B.

Sample Analysis

All sample results are reported on an as-received basis except as noted in the Analyst Comments. All samples were analyzed within holding times except as noted in Appendix A. All analyses met QC acceptance criteria except as noted in the Analyst Comments or Appendix A.

Field Measurements

All field measurements met QC acceptance criteria except as noted in the Analyst Comments or Appendix A.

QC Note

Routine sample quality control results such as blanks, matrix spikes, and laboratory duplicates, etc. are reported on the quality control pages of this report. Certain of the reported QC criteria may not be applicable or otherwise affect the data usability. Appendix C summarizes the guidelines used by the Region 8 Laboratory to qualify data. This is a general table and may or may not be applicable to this project.

Analyst Comments

Chlorophyll by EPA 446.0

Station ID: S EPA Tag No.		Date / Ti Matrix: \	ime Sampled:	08/19/15		Workoro			C
Method	Parameter	Results	Units	Qual- ifier		t Dilution			Batch
EPA 446.0	Chlorophyll-a	< 2.00	ug/L		2.00	1 08/2	1/2015	JWM	1500449
Station ID: E	Baker's Bridge	Date / Ti Matrix: \	ime Sampled:	08/19/15		Workord			C
Method	Parameter	Results	Units	Qual- ifier	Report Limit	t Dilution			
EPA 446.0	Chlorophyll-a	< 2.34	ug/L		2.34	1 08/2	1/2015	JWM	1500449
Station ID: A		Date / Ti Matrix: \	i me Sampled: Water	08/19/15		Workord			C
Method	Parameter	Results	Units			t Dilution			
EPA 446.0	Chlorophyll-a	< 3.34	ug/L		3.34	1 08/2	1/2015	JWM	1500449
Station ID: A		Date / Ti Matrix: \	ime Sampled:	08/19/15		Workord			C
Method	Parameter	Results	Units	Qual- ifier	Report Limit	t Dilution			
EPA 446.0	Chlorophyll-a	< 2.00	ug/L		2.00	1 08/2	1/2015	JWM	1500449
Station ID: (EPA Tag No.		Date / Ti Matrix: \	i me Sampled: Water	08/19/15		Workord			C
Method	Parameter	Results	Units	Qual- ifier	Report Limit	t Dilution			
EPA 446.0	Chlorophyll-a	< 3.32	ug/L		3.32	1 08/2	1/2015	JWM	1500449

Inorganic Chemistry Parameters

inor game	Chemistry Tarameters	•						
Station ID: S	Sanarita Park	Date / Tim	e Sampled:	: 08/19/15	07:45	Workorder 150	8040	
EPA Tag No.	.:	Matrix: Wa	ater			Lab Number: 15080	40-01	. A
Method	Parameter	Results	Units	Qual- ifier	Report Limit	Dilution Factor Analyzed	Ву	Batch
EPA 365.4 - 7	TPPhosphorus	< 0.0100	mg/L		0.0100	1 08/21/2015	JDS	1500424
Station ID: S			e Sampled:	: 08/19/15		Workorder 150		
EPA Tag No.	.:	Matrix: Wa	ater			Lab Number: 15080	40-01	В
Method	Parameter	Results	Units	Qual- ifier	Report Limit	Dilution Factor Analyzed	Ву	Batch
EPA 415.1	Total Nitrogen	0.125	mg/L		0.100	1 08/20/2015	JDS	1500423
Station ID: H	Baker's Bridge		e Sampled:	: 08/19/15	5 08:30	Workorder 150	08040	
EPA Tag No.	.:	Matrix: Wa	ater			Lab Number: 15080	40-02	2 A
Method	Parameter	Results	Units	Qual- ifier	Report Limit	Dilution Factor Analyzed	Ву	Batch
EPA 365.4 - 7	TPPhosphorus	< 0.0100	mg/L		0.0100	1 08/21/2015	JDS	1500424
	Baker's Bridge		e Sampled:	: 08/19/15		Workorder 150		
EPA Tag No.	.:	Matrix: Water Lab Number: 1508040-02				2 B		
Method	Parameter	Results	Units	Qual- ifier	Report Limit	Dilution Factor Analyzed	Ву	Batch
EPA 415.1	Total Nitrogen	0.103	mg/L		0.100	1 08/20/2015	JDS	1500423
Station ID: A	A72	Date / Tim	e Sampled:	: 08/19/15	5 09:23	Workorder 150	08040	
EPA Tag No.	.:	Matrix: Wa	ater			Lab Number: 15080	40-03	A
Method	Parameter	Results	Units	Qual- ifier	Report Limit	Factor Analyzed		
EPA 365.4 - 7	TP Phosphorus	0.0170	mg/L		0.0100	1 08/21/2015	JDS	1500424
Station ID: A	A72	Date / Tim	e Sampled:	: 08/19/15	5 09:23	Workorder 150	08040	
EPA Tag No.	.:	Matrix: Wa	ater			Lab Number: 15080	40-03	В
Method	Parameter	Results	Units	Qual- ifier	Report Limit	Dilution Factor Analyzed	Ву	Batch
EPA 415.1	Total Nitrogen	0.113	mg/L		0.100	1 08/20/2015	JDS	1500423

08/20/2015 JDS 1500423

Workorder 1508040

Project: Animas River 2015 nutrients LSR No: 1508040

Inorganic Chemistry Parameters

Station ID: A68

EPA 415.1

EPA Tag No	.:	Matrix: Wa	ater	I	Lab Number: 15080	040-04 A	
Method	Parameter	Results	Units	Qual- Report ifier Limit	Dilution Factor Analyzed	By Ba	atch
EPA 365.4 - '	TPPhosphorus	< 0.0100	mg/L	0.0100	1 08/21/2015	JDS 15	500424
Station ID: A	A68	Date / Tim	e Sampled:	08/19/15 09:36	Workorder 150	08040	
EPA Tag No	.:	Matrix: Wa	ater	I	Lab Number: 15080	040-04 B	
Method	Parameter	Results	Units	Qual- Report ifier Limit	Dilution Factor Analyzed	By Ba	atch
EPA 415.1	Total Nitrogen	0.105	mg/L	0.100	1 08/20/2015	JDS 15	500423

Date / Time Sampled: 08/19/15 09:36

Station ID: CC48	Date / T	ime Sampled:	08/19/15 09:45	Wo	rkorder 150	08040	
EPA Tag No.:	Matrix:	Water	1	Lab Nui	nber: 15080)40-05	A
M.I. I. D. A	D 14	T T *4	Qual. Report				D 4 1
Method Parameter	Results	Units	ifier Limit	Facto	r Analyzed	By	Batch
EPA 365.4 - TP Phosphorus	0.104	mg/L	0.0100	1	08/21/2015	JDS	1500424

Station ID: CC	48	Date / Tim	e Sampled:	08/19/15 09:45	Workorder 1508040
EPA Tag No.:		Matrix: Wa	ater	I	Lab Number: 1508040-05 B
Method	Parameter	Results	Units	Qual- Report ifier Limit	Dilution Factor Analyzed By Batch

mg/L

0.100

< 0.100

Total Nitrogen

Certificate of Analysis

Project: Animas River 2015 nutrients LSR No: 1508040 Chlorophyll by EPA 446.0 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1500449 - EPA 446									
Method Blank (1500449-BLK1)				Prepared:	08/20/15	Analyzed	1: 08/21/15		
Chlorophyll-a	< 200	200	ug/L						
Method Blank Spike (1500449-BS1)				Prepared:	08/20/15	Analyzed	l: 08/21/15		
Chlorophyll-a	988	200	ug/L	1000		98.8	50-150		
Duplicate (1500449-DUP1)	So	ource: 150804	0-01	Prepared:	08/20/15	Analyzed	l: 08/21/15		
Chlorophyll-a	1.87	2.00	ug/L		1.87			0.00	20

Project: Animas River 2015 nutrients LSR No: 1508040 Inorganic Chemistry Parameters - Quality Control

Phosphorus

Phosphorus

Method Blank Spike (1500424-BS1)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1500423 - Default Prep GenC	hem								
Method Blank (1500423-BLK1)				Prepared	& Analyze	ed: 08/20/	15		
Total Nitrogen	< 0.100	0.100	mg/L		-				
Method Blank (1500423-BLK2)				Prepared	& Analyze	ed: 08/20/	15		
Total Nitrogen	< 0.100	0.100	mg/L						
Method Blank Spike (1500423-BS1)				Prepared	& Analyze	ed: 08/20/	15		
Total Nitrogen	1.86	0.100	mg/L	2.00		93.0	80-120		
Duplicate (1500423-DUP2)	Sou	rce: 150804	0-01	Prepared	& Analyze	ed: 08/20/	15		
Total Nitrogen	0.124	0.100	mg/L		0.125			0.482	20
Matrix Spike (1500423-MS2)	Sou	rce: 150804	0-01	Prepared	& Analyze	ed: 08/20/	15		
Total Nitrogen	2.02	0.100	mg/L	2.00	0.125	94.8	80-120		
Matrix Spike Dup (1500423-MSD2)	Sou	rce: 150804	0-01	Prepared	& Analyze	ed: 08/20/	15		
Total Nitrogen	2.03	0.100	mg/L	2.00	0.125	95.4	80-120	0.642	20
Reference (1500423-SRM2)				Prepared	& Analyze	ed: 08/20/	15		
Total Nitrogen	1.78	0.100	mg/L	2.00		89.2	80-120		
Batch 1500424 - Default Prep GenC	hem								
Method Blank (1500424-BLK1)				Prepared:	08/20/15	Analyzed	l: 08/21/15		

< 0.0100

0.486

0.0100

0.0100

mg/L

mg/L

0.500

Prepared: 08/20/15 Analyzed: 08/21/15

97.2

80-120

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1500424 - Default Prep GenCl	nem								
Duplicate (1500424-DUP2)	Sor	ırce: 150804	0-01	Prepared:	08/20/15	Analyzed	1: 08/21/15		
Phosphorus	0.0050	0.0100	mg/L		0.0054			7.80	20
Matrix Spike (1500424-MS2)	Sor	ırce: 150804	0-01	Prepared:	08/20/15	Analyzed	1: 08/21/15		
Phosphorus	0.496	0.0100	mg/L	0.500	0.0054	98.1	80-120		
Matrix Spike Dup (1500424-MSD2)	Sor	ırce: 150804	0-01	Prepared:	08/20/15	Analyzed	1: 08/21/15		
Phosphorus	0.491	0.0100	mg/L	0.500	0.0054	97.1	80-120	1.03	20
Reference (1500424-SRM1)				Prepared:	08/20/15	Analyzed	1: 08/21/15		
Phosphorus	4.12	0.0500	mg/L	4.00		103	90-110		

NOTE:

%REC is percent recovery, Result (less sample contribution) divided by the Spike Level

RPD is the Relative Percent Difference (difference between the Result and the Source Result) divided by their average

				Cooler temp =							MATRIX	1- HNO, 2- H ₂ SO, 3- NaOH 4-HCI	ERESERVATIVES 1-H
Dato/Time				3-Received By:	Date/Time						2-Received By:	A 8:19:15 16:30	The Sund My
Date/Time				3-Relinquished By	Date/Time						2-Relinquished By:	Date Time 8/19/2014:30 pm	Sieve AperiSandra Spence
				_		-	H						
						Н	Н	Н					
							+		_				
Preserved at Lab		A				×	\vdash	7	8	9:45	8/19/2015	Cement Creek	CC-48
Preserved at Lab		20				×		7	8	9:45	8/19/2015	Cement Creek	CC-48
	-	5	So.				×	7	8	9:45	8/19/2015	Cement Creek	CC-48
Preserved at Lab		A				×		7	8	9:36	8/19/2015	Animas Upstream of Cement Creek	A-68
Preserved at Lab		00				×		7	8	9:36	8/19/2015	Animas Upstream of Cement Creek	A-68
	-1	^	- 04			_	×	7	×	9:36	8/19/2015	Animas Upstream of Cement Creek	A-68
Preserved at Lab		A			6220	×		7	8	9:23	8/19/2015	Animas Site	A-72
Preserved at Lab		8				×		7	8	9:23	8/19/2015	Animas Site	A-72
		^	- 03				×	7	8	9:23	8/19/2015	Animas Site	A-72
Preserved at Lab		A			3%	×	_	7	8	8:30	8/19/2015	Animas DS Bakers Bridge	Bakers Bridge
Preserved at Lab		β				×		7	٤	8:30	8/19/2015	Animas DS Bakers Bridge	Bakers Bridge
	_	^	- 02				×	7	8	8:30	8/19/2015	Animas DS Bakers Bridge	Bakers Bridge
Preserved at Lab		A				×	<u></u>	7	8	7:45	8/19/2015	Animas at Sanarita Park	Sanarita Park
Preserved at Lab		8				×		7	8	7:45	8/19/2015	Animas at Sanarita Park	Sanarita Park
	1	C	10-040301				×	7	8	7:45	8/19/2015	Animas at Sanarita Park	Sanarita Park
LAB ID.	NUMBER					Tota Nitro	Chlorophy	PRESER	MATRIX	TIME	DATE	STATION DESCRIPTION + NOTES	Steve Auer STATION ID
	OF (-						Signature:	Name:
	CONT					rus		VE					SAMPLER(S):
	AINEF									6	1508040	Cement Creek/Animas Green Color Study	Cement Creek/Anim
COMMENTS	RS			ANALYSIS						*	LSR #		PROJECT NAME
Golden, CO 80403 Fax: 303-312-7800													B

Appendix A - Exceptions Report

<u>Lab Number</u> <u>Sample Name</u> <u>Analysis</u> <u>Analyte Name</u> <u>Explanation</u>

Certificate of Analysis

Project: Animas River 2015 nutrients LSR No: 1508040 Appendix B - Samples and Analysis

Certificate of Analysis

Work Order #	# Samples	<u>Analysis</u>	Method Name	<u>Lab SOP</u>
1508040	5	Chlorophyll-a by spec	EPA 446.0	ORGM-010v10 Chlorophyll A (Method 446)
1508040	5	TOC - TN	EPA 415.1	INORM-323v10_TOC-T N
1508040	5	TP - R8	EPA 365.4 - TP	Draft SOP

Appendix C - Data Assessment Guidelines

QC Check (Symbol)	Flagging Criteria
Initial Calibration (ICAL)	All failing analytes for all samples are qualified as estimated.
Initial Calibration	High failure: All detections for failing analytes for all samples are qualified as estimated.
Verification (ICV) or	Low failure: All failing analytes for all samples are qualified as estimated.
Standard Reference	
Material (SRM)	
Continuing Calibration	High failure: All detections for failing analytes for all associated samples are qualified as
Verification (CCV)	estimated. Low failure: All failing analytes for all associated samples are qualified as
	estimated.
Continuing Calibration	All detections for failing analytes for all associated samples where the concentration in the
Blank (CCB)	blank is greater than 1/10 the amount measured in the sample OR the blank contamination
	otherwise affects the sample results are qualified as estimated.
Blanks (BLK) Preparation	All detections for failing analytes for all samples where the concentration in the blank is
Blank, Method, Trip,	greater than 1/10 the amount measured in the sample OR the blank contamination otherwise
Storage, etc.	affects the sample results are qualified as estimated.
Lab Control Sample	High failure: All detections for failing analytes for all associated samples are qualified as
(LCS) or Standard	estimated. Low failure: All failing analytes for all associated samples are qualified as
Reference Material (SRM)	estimated.
or Blank Spike (BS)	II' 1 6 '1 All 14 (6 6 '1' 1 ' 1 1
Matrix Spike (MS)	High failure: All detections for failing analytes in the parent sample are qualified as
	estimated. Low failure: All failing analytes in the parent sample are qualified as estimated. No qualification if the native concentration is greater than or equal to 4x the spike
	concentration.
Matrix Spike Duplicate	%R Failure: Same as matrix spike. RPD Failure: All failing analytes in the parent sample are
(MSD)	qualified as estimated.
Duplicate Sample (DUP)	All failing analytes in the parent sample are qualified as estimated. No qualification if the
	native concentration is less than the RL.
Serial Dilution (SD)	All failing analytes in the parent sample are qualified as estimated. No qualification if native
	concentration is less than or equal to 50x the RL.
Detection Limit Standard	High failure: All detections for failing analytes less than or equal to 5x the concentration in
(CRA) or (CRL)	the CRL for all associated samples are qualified as estimated. Low failure: All failing
	analytes less than or equal to $5x$ the RL for all associated samples are qualified as estimated.
Internal Standard (IS)	All analytes associated with the failing IS are qualified as estimated.
Surrogate Spike (SURR)	High failure: All detections for all analytes associated with the failing surrogate are qualified
	as estimated. Low failure: All analytes associated with the failing surrogate are qualified as
	estimated. If obvious chromatographic interference with the surrogate is present,
	qualification may not be necessary and will be based on the professional judgment of the
	analyst.

Note: The J Qualifier is used to indicate an estimated value.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8 LABORATORY

16194 W 45th Drive GOLDEN, CO 80403-1790 Phone 303-312-7700

Ref: TMS-L

MEMORANDUM

SUBJECT: Animas River - 2015 (1508040) Sample Disposal

FROM: Gregory J. Saunders, Environmental Scientist (signed)

Laboratory Services Program

TO: Sandra Spence, 1595 Wynkoop

Emergency Response

Space limitations require the Region 8 Laboratory to follow timely sample disposal procedures. Laboratory policy is to dispose of samples 60 days after data analysis packages are delivered to program managers. Additionally, the laboratory's policy is to not run or rerun samples that have exceeded holding times. Samples exceeding analytical holding times will be disposed of appropriately regardless of the 60 day disposal policy.

Please advise me by **October 27, 2015** if you require the laboratory to retain the samples longer than the normal 60 days.

If you would like the laboratory to retain the samples for a period longer than 60 days after receipt of the data packet or if you have other questions regarding this policy, please contact me by using the information below:

Gregory J. Saunders, Environmental Scientist Laboratory Services Program, 8TMS-L Email: saunders.gregory@epa.gov

Telephone: (303) 312-7709

Fax: (303) 312-7800

				ADDL	LO														RESULT_									SAMP_D		
					ON_I EPATAGN			AT SAMPLE_S	SAMPDA	PREPDAT					CASNUM SURRO		DETECTI DETECT	E L_QUALIF					SPIKELE REC		LOWERC			SAMP_D EPTH_UN		
CLIENT	PROJECT	PROJECTNUM	LABNAME	STATION_ID NFO	0	ID MATRIX	X RIX	TYPE 1	ΓE	E ANADATE BATCH	ANALYSIS	METHODNAME	PREPNAME	ANALYTE	BER ATE	RESULT	ON D	IER	R MD	L MRL	UNITS	DILUTION	VEL RY	UPPERC	L L ANALYST PS	OLIDS STURE	S EPTH	EPTH_TO ITS	1.,	ME Latitude Longitude El
						1500040			2015-08-	2015-08-			5 (); 5																1	015-08-
Francisco Decisiones	Animas River 2015	1508040	U.S. EPA, Region 8	A C O		1508040-	\\/ata#		19 09:36:00	20 20 10:32:00 17:06:49 1500423	TOC - TN	EPA 415.1	Default Prep GenChem	Tatal Nitra a an	NA FALCE	0.105	0.105			50 0.100		4							Sandie	9:36:00
Emergency Response	nutrients	1508040	Laboratory	A68		04 Water	Water			10:32:00 17:06:49 1500423 2015-08- 2015-08-	TOC - IN	EPA 415.1	GenChem	Total Nitrogen	NA FALSE	0.105	0.105 Y		0.0	50 0.100) mg/L				JD8			Feet		9:36:00
	Animas River 2015		U.S. EPA, Region 8			1508040-			10	2015-06- 2015-06-			Default Prep																Sandie	ο
Emergency Response		1508040	Laboratory	A68		04 Water	Water	Grah	19.36.00	11:32:00 09:24:01 150042 ⁴	TP - R8	EPA 365.4 - TP	GenChem	Phosphorus	7723-14-0 FALSE		<0.0100 N		ا ا	040 0.010	00 ma/l	1			LIDS			Feet		9:36:00
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	Animas River 2015		U.S. EPA, Region 8			1508040-			19	20 21	Chlorophyll-a by				42617-16-														Sandie	9
Emergency Response		1508040	Laboratory	A68		04 Water	Water	Grab 0	9:36:00	17:05:00 08:55:00 1500449		EPA 446.0	EPA 446	Chlorophyll-a	3 FALSE		<2.00 N		UD 0.50	0 2.00	ug/L	1			JWM			Feet		9:36:00
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Emergency Response	nutrients	1508040	Laboratory	A72		03 Water	Water	Grab 0	9:23:00	10:32:00 16:51:14 1500423	TOC - TN	EPA 415.1	GenChem	Total Nitrogen	NA FALSE	0.113	0.113 Y		0.0	50 0.100) mg/L	1			JDS			Feet	Spence	9:23:00
								2	2015-08-	2015-08- 2015-08-																			1	015-08-
	Animas River 2015		U.S. EPA, Region 8			1508040-		1	19	20 21			Default Prep																Sandie	9
Emergency Response	nutrients	1508040	Laboratory	A72		03 Water	Water				TP - R8	EPA 365.4 - TP	GenChem	Phosphorus	7723-14-0 FALSE	0.0170	0.0170 Y		0.00	040 0.010	00 mg/L	1			JDS			Feet		9:23:00
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Г	Animas River 2015	1508040	U.S. EPA, Region 8	A 70		1508040-	10/242]	19	20 21 17:05:00 08:55:00 1500449	Chlorophyll-a by	EDA 440.0	EPA 446	Oblanadavilla	42617-16- 3 FALSE		<3 34 N			3 34		4							Sandie	9 9:23:00
Emergency Response	nutrients	1508040	Laboratory	A/Z		03 Water	Water			17:05:00	spec	EPA 446.0	EPA 446	Chlorophyll-a	3 FALSE		<3.34 N		UD 0.8,	3 3.34	ug/L	<u> </u>			JVVIVI			Feet	1 - 1	015-08-
	Animas River 2015		U.S. EPA, Region 8			1508040-			10	2015-06- 2015-06-			Default Prep																Sandie	015-06-
Emergency Response		1508040	Laboratory	Baker's Bridge		02 Water	Water	Grab)8·30·00	10:32:00 16:38:05 1500423	TOC - TN	EPA 415.1	GenChem	Total Nitrogen	NA FALSE	0.103	0 103 Y		ا ا	50 0.100) ma/l	1			Ins			Feet		8:30:00
Emergency Response	nathents	1300040	Laboratory	Daker 3 Bridge		VValci	vvatci			2015-08- 2015-08-	100-111	LI X 410.1	denonem	Total Milogon	IVA ITALOL	0.103	0.100		0.00	0.10) IIIg/L	<u> </u>			1 000			1 661		015-08-
	Animas River 2015		U.S. EPA, Region 8			1508040-			19	20 21			Default Prep																Sandie	9
Emergency Response		1508040	Laboratory	Baker's Bridge		02 Water	Water	Grab	08:30:00	11:32:00 09:21:07 150042 ⁴	TP - R8	EPA 365.4 - TP	GenChem	Phosphorus	7723-14-0 FALSE		<0.0100 N		U 0.00	040 0.010	00 mg/L	1			JDS			Feet		8:30:00
								2	2015-08-	2015-08- 2015-08-				· ·							Ĭ								1 :	015-08-
	Animas River 2015		U.S. EPA, Region 8			1508040-		1	19	20 21	Chlorophyll-a by				42617-16-														Sandie	9
Emergency Response	nutrients	1508040	Laboratory	Baker's Bridge		02 Water	Water	Grab 0	08:30:00	<u> 17:05:00 08:55:00 1500449</u>	spec	EPA 446.0	EPA 446	Chlorophyll-a	3 FALSE		<2.34 N		UD 0.59	9 2.34	ug/L	1			JWM			Feet	Spence	8:30:00
									2015-08-	2015-08- 2015-08-																			1	015-08-
	Animas River 2015		U.S. EPA, Region 8			1508040-		1	19	20 20			Default Prep																Sandie	9
Emergency Response	nutrients	1508040	Laboratory	CC48		05 Water	Water			10:32:00 17:21:37 1500423	TOC - TN	EPA 415.1	GenChem	Total Nitrogen	NA FALSE		<0.100 N		U 0.0	50 0.100) mg/L	1			JDS			Feet		9:45:00
	A . B. 0045					4500040			2015-08-	2015-08- 2015-08-			D (1) D																1 1	015-08-
Francisco Decres	Animas River 2015	1508040	U.S. EPA, Region 8	CC48		1508040-	\\/ata#		19	20 21 11:32:00 09:25:28 1500424	TD DO	EPA 365.4 - TP	Default Prep GenChem	Dhaanhama	7723-14-0 FALSE	0.104	0.104 Y			040	20	4			JDS			 	Sandie Spence	9
Emergency Response	numents	1506040	Laboratory	CC46		05 Water	Water			2015-08- 2015-08-	IP-Ro	EPA 303.4 - 1P	Genchem	Phosphorus	7723-14-0 FALSE	0.104	0.104	_	0.00	040 0.010	JU IIIg/L				100			Feet		015-08-
	Animas River 2015		U.S. EPA, Region 8			1508040-			10	2013-06- 2013-06-	Chlorophyll-a by				42617-16-														Sandie	a
Emergency Response		1508040	Laboratory	CC48		05 Water	Water	Grah	19.45.00	17:05:00 08:55:00 1500449		EPA 446.0	EPA 446	Chlorophyll-a	3 FALSE		<3.32 N		UD 0.8	3 332	lua/l	1			JWM					9:45:00
Emergency response	Hatricito	1000040	Laboratory	0040	+	VValei	vvater	2	2015-08-	2015-08- 2015-08-	Spec	LI 7(440.0	LITTAG	Опогорнун а	O ITALOL		10.02		0.00	0.02	ug/L	- '			- OVVIVI			1 661		015-08-
	Animas River 2015		U.S. EPA, Region 8			1508040-			19	20 20			Default Prep																Sandie	9
Emergency Response		1508040	Laboratory	Sanarita Park		01 Water	Water	Grab	7:45:00	10:32:00 15:46:21 1500423	TOC - TN	EPA 415.1	GenChem	Total Nitrogen	NA FALSE	0.125	0.125 Y		0.0	50 0.100) mg/L	1			JDS			Feet	Spence	7:45:00
, ,			<u> </u>							2015-08- 2015-08-		1		Ĭ							ľ									015-08-
	Animas River 2015		U.S. EPA, Region 8			1508040-		1	19	20 21			Default Prep																Sandie	9
Emergency Response		1508040	Laboratory	Sanarita Park		01 Water	Water	Grab 0	7:45:00	11:32:00 09:15:20 1500424	TP - R8	EPA 365.4 - TP	GenChem	Phosphorus	7723-14-0 FALSE		<0.0100 N		U 0.00	0.010	00 mg/L	1			JDS			Feet	Spence	7:45:00
								2	2015-08-	2015-08- 2015-08-																				015-08-
	Animas River 2015		U.S. EPA, Region 8			1508040-		1	19	20 21	Chlorophyll-a by				42617-16-														Sandie	9
Emergency Response	nutrients	1508040	Laboratory	Sanarita Park		01 Water	Water	Grab	7:45:00	17:05:00 08:55:00 1500449	spec	EPA 446.0	EPA 446	Chlorophyll-a	3 FALSE		<2.00 N		UD 0.50	0 2.00	ug/L	1			JWM			Feet	Spence	7:45:00